12. A floor working machine as defined in claim 11, wherein said running wheels include a dirigible drive wheel and a pair of right and left driven wheels, said spin turn control means being operable to cause the self-propelled vehicle body to make a spin turn about a middle position between said right and left driven wheels by steering sideways and driving said dirigible drive wheel.

13. The floor working machine of claim 11, wherein said running wheels include a dirigible front drive wheel and a pair of right and left driven rear wheels, said spin turn control means being operable to cause the self-propelled vehicle body to make a spin turn about a middle position between said right and left rear driven wheels by steering sideways and driving said dirigible front drive wheel.

14. The floor working machine of claim 13, wherein said right and left rear wheels are non-dirigible wheels.

REMARKS

Reconsideration of this application, as amended, is respectfully requested. New claims 12 to 14 are presented for consideration.

The allowance of claims 1 to 10 is gratefully acknowledged.

Claim 11 was rejected under 35 USC § 102(b) as allegedly anticipated by either of Hiratsuka '512 and EP '736. Applicants respectfully traverse.

The Examiner takes the position that both references disclose a self-propelled cleaner having: "a self-propelled vehicle body including running wheels, wheel drive means, a working implement for treating a floor surface, and means for driving said working implement" and

control means (36) for controlling the operations of the self-propelled vehicle body, including running control means (53), with the cleaner being capable of a spin turn. Applicant agrees that these elements are set forth in claim 11.

However, claim 11 is distinguished from the cited references, since the apparatus of the references lack the other features of the presently claimed invention, e.g. the spin turn control means for causing said self-propelled vehicle body to make a spin turn automatically to adjust the working implement to a work line adjacent a work line treated before the spin turn.

The Examiner apparently comes to this conclusion based on his interpretation of his the assumption that a "work line" is interpreted as merely an imaginary line or area of a floor to be cleaned, and concludes that a new "work line" will appear inevitably whenever the vehicle or machine makes a spin turn, and that "spin turn control means" is merely a means for controlling the spin turn.

However, as described in the specification, the "work line" represents not just a line substantially identical to the running line of the machine, but is a predetermined work line. Thus, without control means, the machine may deviate from the work line or require positional adjustment of the apparatus relative to the work line, as described in page 1, line 28-29 and page 2, lines 10-12 and 20-24.

More particularly, as described in page 29, line 25 through page 30, line 17, the "work line" is specified as the application width C of the applicator mounted on the floor working machine and a first "work line" is set as the position where the application work is started and a

next "work line" is set such that the next line will overlap, as its adjacent side end, the first work line on which the work has been completed by a predetermined overlap width H.

The control means mounted on the working machine executes a control scheme in such that when no spin control command is given, i.e. under the normal running condition, the machine will run from one and to the opposite end of the work area according to the setting of the "work lines." When a spin turn command is given, the self-propelled vehicle body will make a spin turn automatically "to align the work implement to a work line adjacent a work line treated before said spin turn" under the control of the spin control means 56 incorporated in this control means 36. At the same time, the working machine is caused to run straight and accurately along the work line on which the application work has already been done.

Neither of the cited references disclose or teach the above to "align the work implement to a work line adjacent a work line treated before said spin turn". Therefore, the self-propelled cleaners of these cited references cannot achieve the functions and effects described in page 3, line 19 through page 4, line 15.

Moreover, the '592 patent, as described in column 1, line 49-53, it is intended to provide "a cleaning robot which is adapted to travel along side walls as positioned at the smallest possible distance therefrom so as to completely clean an area close to the side wall." The descriptions found therein concerning cleaning of an area distant from the side wall are limited to column 1, line2 21-23 and to column 5, lines 57-62, and no specific descriptions are given at all therein concerning how to control the running of the machine (robot) in such area. There is also no teaching concerning how to control operation of the cleaner so as to cause it to make a U turn

in the middle of the work area, i.e. to run in the opposite direction along the same work line on which the work has already been done

The EP reference provides no specific disclosure concerning a spin turn, and, according to the method described therein, there is no hint or suggestion as to how to control the cleaner to make a U turn in the middle of the work area to run in the opposite direction along the same work line.

In sum, neither reference identifies nor addresses the objects of the present invention, and neither provide the teaching as to how to acheive such objects.

In view of the foregoing, it is respectfully submitted that all rejections have been overcome and that this application is now in condition for formal allowance.

Should any questions arise, the Examiner is invited to telephone attorney for applicant at the telephone number provided below.

If any fees are due to enter this amendment, the Examiner is authorized to charge Deposit Account No. 500624.

Respectfully submitted,

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